

REMARKS

A. Status of the Claims

Claims 1, 4, 6-12, 15, 23, 29-35, 37, and 39 were rejected in the Final Office Action dated December 31, 2009. Claims 11, 12, and 16 are cancelled. Claims 1, 6-10, 15, 19, and 29 are amended. Support for the amendments can be found in the specification at page 3, last paragraph to page 4, first paragraph, and in FIG. 1. No new matter has been added.

B. Examiner Interview

A summary of the interview was included in the response filed on March 31, 2010, which is hereby incorporated by reference. Applicants' representative again thank the examiner and his supervisor for discussing this case in an effort to identify allowable subject matter.

C. Overlap in sequences recited in claims

Applicants urge the examiner to consider searching the sequence of 54755-55810 of SEQ ID NO:1, which is recited in the independent claims, because this segment is common to all of the constructs recited in the dependent claims. As is shown below, all of the claimed constructs share the sequence in SEQ ID NO:1 that is recited in independent claims 1, 15, and 19 (shown in bold).

Constructs

49485 – 61006 (11.5 kb)

49485 – 57111 (7.6 kb)

49485 – 55810 (6.3 kb)

54807 – 57110, 57945 – 61006 (6.2 kb)

51389 – 55810 (4.4 kb)

52199 – 56423 (4.2 kb)

53820 – 55810 (1.9 kb)

54755 – 55810 (0.96 kb)

Applicants respectfully contend that the art cited but not relied on by the Examiner does not anticipate any of the sequences, including the segment of 54755 – 55810 recited in each of the independent claims. The references and their alleged teachings are:

- Krystal (U.S. Patent 6,218,162), SEQ ID NO:1, starting at nucleotide 800 and setting forth nucleotides 55668-55810 of SEQ ID NO:1; and,
- Lucas (*Blood*, 93(6):1922-1933, 1999) setting forth nucleotides 55668-55810 of SEQ ID NO:1.

Based on these references, the segment 54755 – 55810 of SEQ ID NO:1 contains sequences that are novel with respect to each of these references. With respect to both Krystal and Lucas, the independent claims set forth a sequence that contains at least the additional nucleotides of 54755 – 55667. The dependent claims recite further nucleotides within SEQ ID NO:1 that are not disclosed by either reference. Consequently, neither Krystal nor Lucas anticipates the claims.

D. Claims Are Enabled

Based on the discussion during the interview, the Examiner indicated that he did not believe there was an enablement issue with the claims. Applicants further note that the Examples, including paragraph [0264] set forth that all the vector constructs had activity in ES cells. Accordingly, Applicant respectfully contend the claims are enabled and allowable.

E. Conclusion

The Examiner is invited to contact the undersigned agent at (512) 536-3081 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted

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